ABSTRACT

A health assessor for assessing health of a target element within a multi-element system includes multiple sensors, each being operatively coupled to the target element to produce measures of the target element. The health assessor also includes measure collectors, each of which collects a measure from one of the sensor. In addition, the health assessor includes evaluators. Each evaluator evaluates at least a subset of all the measures collected by the measure collectors in accordance with (1) a predefined evaluation definition for the respective evaluator and (2) at least a subset of all historical measures to provide an assessment. A probabilistic reasoning network is coupled to the evaluators to receive the assessment from each of the evaluators and to combine all the assessments in accordance with a preconfigured reasoning definition so as to provide an overall health assessment of the target element. A health assessment system including the health assessor is also described.